

200312863-1

10/690,177

IN THE CLAIMS:

Please amend the claims as follows:

1. (withdrawn) A stencil for forming heat yieldable joining material, comprising:  
at least one pattern formation member; and  
at least one channel formation portion associated with said pattern formation member.
2. (withdrawn) The stencil of claim 1, wherein said channel is configured to form an out-gassing channel.
3. (withdrawn) The stencil of claim 1, further comprising a plurality of pattern formation members.
4. (withdrawn) The stencil of claim 3, wherein said channel is defined by a plurality of pattern formation members.
5. (withdrawn) The stencil of claim 4, wherein a channel is defined between said pattern formation members.
6. (withdrawn) The stencil of claim 5, wherein said plurality of pattern formation members comprises four pattern formation members and further comprising four channels defined between each of said pattern formation members.
7. (withdrawn) The stencil of claim 6, wherein said channels form an 'X' pattern.
8. (withdrawn) An electronic circuit board assembly, comprising:  
a plurality of circuit boards  
a via extending through at least one circuit board, wherein said via is coupled to at least one component pad; and

200312863-1

10/690,177

an electronic component coupled to said component pad by forming a joining material pattern on said component pad, said joining material pattern having at least one out-gassing channel.

9. (withdrawn) The assembly of claim 8, wherein said coupling further comprises heating said electronic circuit board assembly above a melting point of said joining material and cooling said joining material to establish a physical and electrical couple.

10. (withdrawn) The assembly of claim 8, further comprising a plurality of vias.

11. (withdrawn) The assembly of claim 8, further comprising a joining material mask disposed on said via.

12. (withdrawn) The assembly of claim 8, wherein said component pad comprises a ground pad.

13. (original) A method of coupling circuit board assembly and electronic components, comprising:

providing a circuit board, wherein said circuit board includes at least one component pad and a via extending through at least one layer of said circuit board;

providing an electronic component;

disposing a joining material mask on said via;

forming a joining material pattern on said component pad, said joining material pattern including an out-gassing channel; and

heating said circuit board assembly and said electronic component.

14. (original) The method of claim 13, further comprising cooling said circuit board assembly and said electronic component.

15. (original) The method of claim 13, further comprising forming a plurality of joining material patterns on said component pad.

200312863-1

10/690,177

16. (original) The method of claim 15, further comprising forming a plurality of joining material patterns on each of a plurality of said component pads.

17. (original) The method of claim 13, wherein said joining material comprises solder.

18. (original) The method of claim 13, wherein said component pad comprises a ground pad.

19. (currently amended) A method of coupling a circuit board assembly and electronic components ~~comprising~~ with a stencil, said method comprising depositing joining material on said circuit board in a pattern that comprises an out-gassing channel.

20. (currently amended) The method of claim 19, wherein said out-gassing channel forms an "X" shape in said joining material when viewed from above looking down onto said pattern.

21. (previously presented) The method of claim 19, further comprising:  
placing a said electronic component in contact with said joining material; and  
heating said joining material.

22. (previously presented) The method of claim 19, wherein depositing joining material comprises depositing solder.

23. (new) The method of claim 19, further comprising selectively passing said joining material through portions of said stencil over a contact on said circuit board, such that said pattern comprises non-contiguous deposits of said joining material on a single contact of said circuit board, said out-gassing channel being disposed between said non-contiguous deposits of said joining material.

24. (new) The method of claim 19, wherein said out-gassing channel forms an X-shape through said deposited joining material on said circuit board when viewed from above.

200312863-1

10/690,177

25. (new) A method of coupling a circuit board assembly and electronic components with a stencil, said method comprising depositing joining material on said circuit board through said stencil, said joining material being selectively passed through portions of said stencil to form a pattern that comprises non-contiguous deposits of said joining material on a single contact of said circuit board.

26. (new) The method of claim 25, wherein said contact comprises a via.

27. (new) The method of claim 25, wherein said contact comprises a contact pad.

28. (new) The method of claim 25, further comprising, with said stencil, forming a plurality of patterns of joining material on a plurality of contacts on said circuit board, each pattern comprising non-contiguous deposits of said joining material.

29. (new) The method of claim 25, wherein said joining material comprises solder.

30 (new) The method of claim 25, further comprising out-gassing channels formed in said pattern between said non-contiguous deposits of said joining material.